7.4 Types of Changeover:

Conversion is the process of changing from the old system to the new one. There are four methods of handling a system conversion. 1) **Parallel Systems Method** 2)**Dual System Method** 3)**Direct Method** 4) **Pilot Approach**

1) The Parallel-Systems Method :

The most secure method of converting from an old to new system is to run both systems in parallel. Under this approach, the new system is set to work alongside the old one. Data are input to both simultaneously until the new system has demonstrated that it functions effectively. Users continue to operate the old system in the usual manner but they also start using the new system. This method is the safest one because it ensures that case of any problems in using the new system, the organization can still fall back to the old system without loss of time and money.

The disadvantages of the parallel systems approach are:

- It doubles operating costs
- The new system may not get fair trial.

2) The Dual System Method or Phase-In Method :

Here the old system is gradually phased out while the new one is being phased in. The cost of conversion is lower and there is little duplication of work or data. In addition direct comparisons between new and old systems need not be made. However, long phase-in periods may create difficulties for analysts. Also, if there are problems in the early phases of implementation rumor about difficulties may assume greater proportions and affect the remaining phases. This method is used when it is not possible to install a new system throughout an organization all at once. The conversion of files, training of personnel or arrival of equipment may force the staging of the implementation over a period of time, ranging from weeks to months. It allows some users to take advantage of the new system early. Also it allows training and installation without unnecessary use of resources.

3) The Direct Method :

This method converts from the old to the new system abruptly, sometimes over a weekend or even overnight. The old system works till a planned conversion day when it is replaced by the new system. There are no parallel activities. There is no failing back to old system. But this method requires careful planning and training sessions must be scheduled and maintained. In the case of hotel reservation, airline reservation etc this method is more suitable. The organization relies fully on the new system. The main disadvantages of this approach are: no other system to fall back on, if difficulties arise with new system. Secondly, wise and careful planning is required.

4) Pilot Approach :

Pilot approach is often preferred in the case of the new system which involves new techniques or some drastic changes in organization performance. In this method, a working version of the system is implemented in one part of the organization such as in a particular department. The users know that it is pilot testing and hence they can experiment to improve the system. When the system is deemed complete it can be installed throughout the organization either by direct method or by phase-in method. This approach provides experience and live test before implementation.

7.5 User Training:

Even well designed system can succeed or fail. Those who are directly or indirectly related with the system development work must know in detail what their roles will be, how they can make efficient use of the system and what the system will or will not do for them. Both systems operators and users need training.

7.5.1 Systems Operators Training

Running of the system successfully depend on the personnel working in the computer centre. They are responsible for providing the necessary support. Their training must ensure that they are able to handle all possible operations, both routine and extra-ordinary in nature.

If the system calls for the installation of new equipment, such as a new computer system, special terminals or different data entry machines, the operators' training should include such fundamentals as how to turn the equipment on and use it, how to power off and a knowledge of what constitutes normal operation. The operators should also be trained on different type of malfunctioning, how to recognize them and what steps should be taken whenever they arise.

As part of their training, operators should be given both a troubleshooting list that identifies possible problems and remedies for them, as well as the names and telephone numbers of individuals to contact when unexpected or unusual problems arise. Training also involves familiarization with run procedures, which involves working through the sequence of activities needed to use a new system on an ongoing basis.

7.5.2 User Training

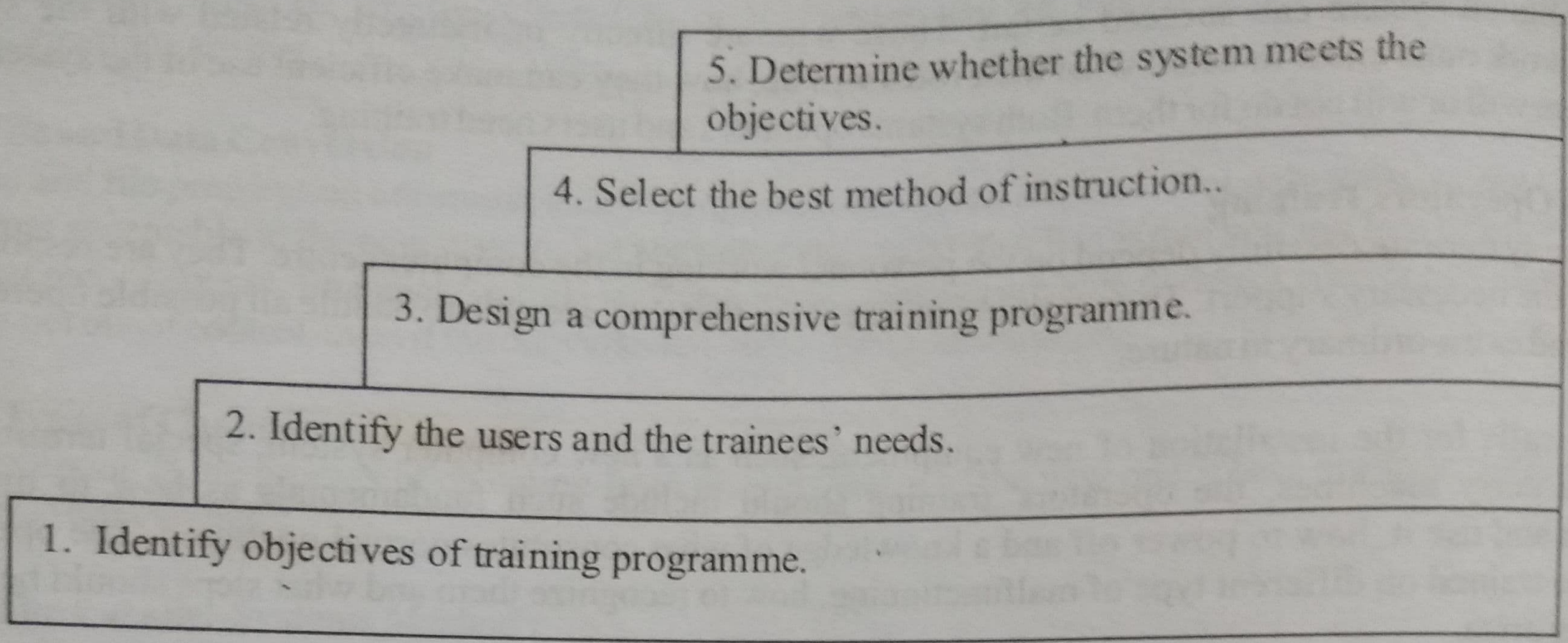
User may be trained on use of equipment, particularly in the case where, for example, a micro-computer is in use and the individual involved is both operator and user. In such cases, user must be given training on how to operate the system also. Questions that may be trivial to the analyst, such as how to turn on a terminal, how to insert a diskette into a micro-computer, or when it is safe to turn off equipment without danger of data loss, are significant problems to new users who are not familiar with computers.

In most of the cases, user training deals with the operation of the system itself, with proper attention given to data handling techniques. It is imperative that users be properly trained in methods of entering transactions, editing data, formulating inquiries, deleting and inserting of records. No training is complete without familiarizing users with simple systems maintenance activities. Weakness in any aspect of training may lead to awkward situations that create user frustration and errors.

Training is done with a view to providing hands-on experience with the new system to users and operators of the system. With interactive systems, users can try out software directly.
In fact training should include

(a) an overview of how the system functions
(b) how it will affect their jobs and
© how it will relate to current manual procedures.

This is the point where structured systems analysis pays off, since many users will have already been intimately involved in the creation of the system from the start. Every employee needs to be reassured that the system isn't a threat to his job and that he also has something to gain from it. The training programmes should be carefully planned and organized. The five important steps to such programmes are:



Further, the training should specifically take care of :

1) User involvement in the equipment use.
2) Introduction to individuals in troubleshooting the systems and coming out unscathed from troubles.
3) Data handling.
4) System maintenance.